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Offshoring and Outsourcing

1. Definitions and Magnitudes
2. Causes and Predictions
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1. Definitions and Magnitudes

1.1. Definitions

- Offshoring: moving production (of either goods or services) outside of the domestic economy. Offshoring might or might not involve trade with offshore subsidiaries; the firm could contract with foreign firms.

> "There is no official definition of the term "offshoring". But it has come to mean, in the media and in common parlance, the actions of American firms in relocating some part of their domestic operations to a foreign country -- automobile firms switching purchases of auto parts from domestic plants to Mexico; the transfer of call centers and sofware development to India; financial firms relocating major parts of their record-keeping activities to one of the Caribbean countries, and so on. In some cases the offshoring firms locate the overseas production in foreign affiliates which they own and control. Some fraction of the value of the firm's domestic sales now consists of intermediate goods or services imported from foreign affiliates rather than produced in the United States" (Schultze, 2004).

- Outsourcing: moving activities (either production or services related) outside of the boundaries of the firm by contracting.

- Offshore outsourcing: Outsourcing activities offshore.

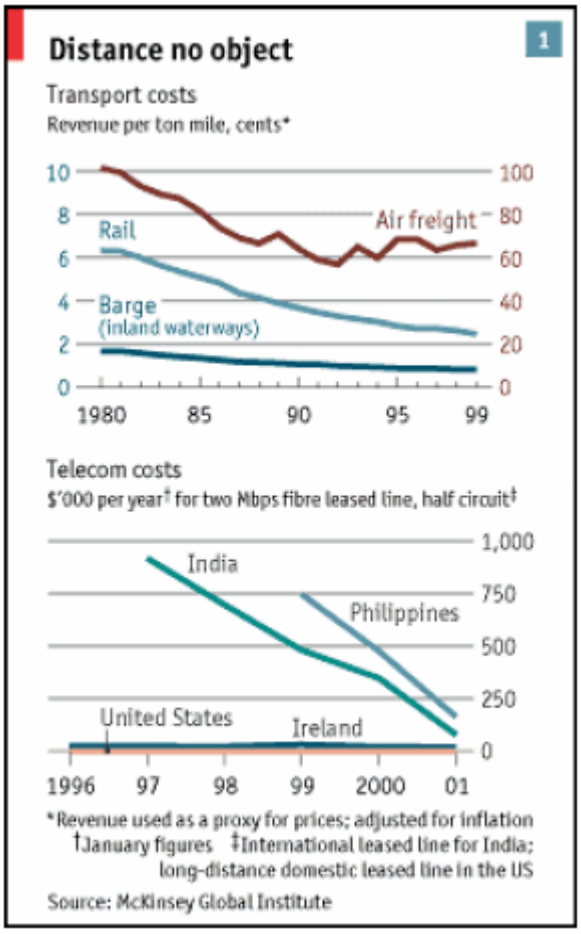
1.2 Magnitudes

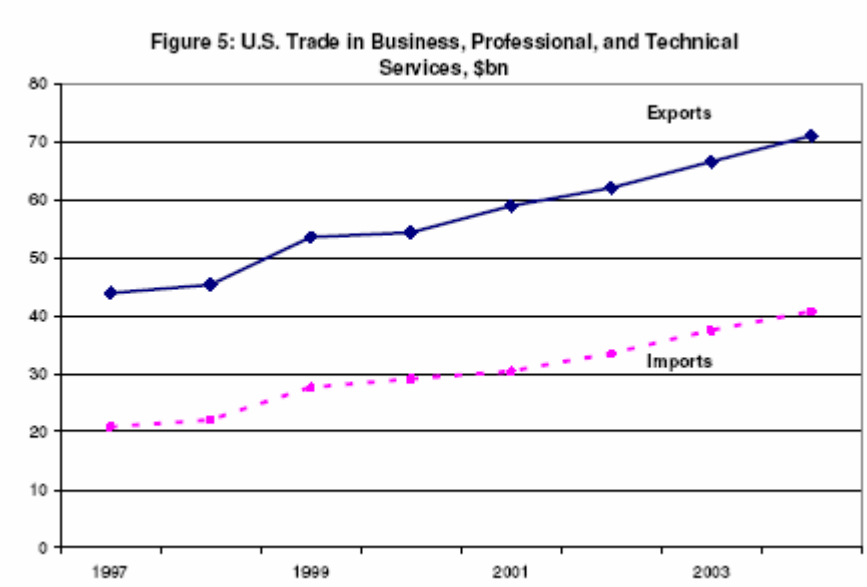
"As Baily and Farrell (2004) note, losses of even 30,000 jobs per month are tiny compared to the two million or more job changes that occur routinely in a single month in the United States: even at the height of the economic expansion of the late 1990's, nearly 100,000

workers per month lost their jobs in mass layoffs. The forecast of 3.4 million jobs to be sent overseas by 2015 likewise seems modest compared to the more than 160 million jobs projected by the Bureau of Labor Statistics (BLS) to exist by 2015, and small even compared to the 35 million net new jobs gained over the past decade. And these 35 million new jobs were themselves the net result of much larger gross numbers of jobs gained and jobs lost." Mankiw and Swagel (2006).

2. Causes and Predictions

- Why is offshoring occurring? This is merely the result of changing comparative advantage, so there is nothing new there.
- Why is outsourcing occurring? Firms are specializing ("focusing on core activities") and many activities formerly undertaken within firms have been contracted out.
- Why is *services* outsourcing and *services* offshoring occurring? Because of decreasing telecommunications costs.
- Note that on net, net services trade is not deteriorating for the United States. Hence, while service imports are increasing, so too are service exports.





Source: Mankiw and Swagel (2006).

3. **Impacts** (Amiti and Wei, 2005)

Table 4. Total Factor Productivity

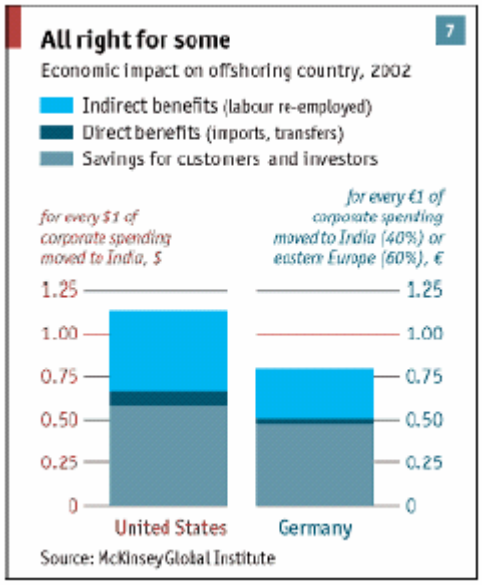
Dependent variable: $\Delta ln(real\ output)_{i,t}$

	OLS								GMM
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
$\Delta oss_{i,t}$	0.235***		0.249***	0.241***	0.341***		0.331***	0.335***	0.258***
	(0.059)		(0.042)	(0.045)	(0.051)		(0.071)	(0.073)	(0.043)
$\Delta oss_{i,t-1}$		0.094**	0.079*	0.065		0.082***	0.097***	0.093***	0.098***
		(0.036)	(0.040)	(0.041)		(0.030)	(0.027)	(0.027)	(0.019)
$\Delta osm_{i,t}$	0.001*		0.001*	0.001*	0.001		0.001*	0.001*	0.0005
	(0.001)		(0.001)	(0.001)	(0.001)		(0.001)	(0.0005)	(0.0004)
$\Delta osm_{i,t-1}$		-0.0004	0.0002	0.0002		-0.0003	0.0001	0.0001	0.0004*
		(0.0003)	(0.0003)	(0.0003)		(0.0003)	(0.0003)	(0.0003)	(0.0002)
$\Delta ln(materials)_{i,t}$	0.389***	0.358***	0.404***	0.406***	0.432***	0.365***	0.443***	0.445***	0.432***
	(0.041)	(0.038)	(0.033)	(0.033)	(0.047)	(0.040)	(0.042)	(0.043)	(0.019)
$\Delta ln(services)_{i,t}$	0.563***	0.592***	0.548***	0.546***	0.508***	0.566***	0.496***	0.495***	0.506***
	(0.048)	(0.042)	(0.036)	(0.036)	(0.047)	(0.043)	(0.042)	(0.042)	(0.022)
$\Delta ln(labor)_{i,t}$	0.059***	0.056**	0.056**		0.013	0.017	0.006		
	(0.021)	(0.022)	(0.022)		(0.025)	(0.028)	(0.026)		
$\Delta ln(skilled\ labor)_{i,t}$				0.029**				0.006	-0.0004
				(0.015)				(0.018)	(0.015)
$\Delta ln(unskilled\ labor)_{i,t}$				0.008				-0.007	-0.003
				(0.013)				(0.013)	(0.010)
$\Delta ln(capital)_{i,t}$	0.013	0.010	0.009	0.579*	0.001	-0.005	-0.002	0.007	-0.007
	(0.021)	(0.025)	(0.021)	(0.032)	(0.012)	(0.010)	(0.010)	(0.051)	(0.040)
$\Delta ln(real\ output)_{i,t-1}$									0.009
									(0.008)
Year fixed effects	yes	yes	yes	yes	yes	yes	yes	yes	yes
Industry fixed effects	no	no	no	no	yes	yes	yes	yes	yes
Joint significance tests:									
$\Delta oss_t + \Delta oss_{t-1}=0$			F(1,95)=27.99	F(1,95)=20.71			F(1,95)=21.70	F(1,95)=20.24	$\chi^2(1)$=31.81
			p-value=0.00	*p-value*=0.00			*p-value*=0.00	*p-value*=0.00	*p-value*=0.00
$\Delta osm_t + \Delta osm_{t-1}=0$			F(1,95)=2.57	F(1,95)=2.36			F(1,95)=2.19	F(1,95)=2.12	$\chi^2(1)$=0.64
			p-value=0.11	*p-value*=0.13			*p-value*=0.14	*p-value*=0.15	*p-value*=0.42
Observations	748	652	652	640	748	652	652	640	541
R-squared	0.96	0.97	0.97	0.97	0.97	0.98	0.98	0.98	

Note: Robust standard errors in parentheses; * significant at 10 percent; ** significant at 5 percent; *** significant at 1 percent; Sargan over identification test in column (9) estimation $\chi^2(20)$=23.08, *p-value*=0.28; and H_0: no autocorrelation z =1.85 Pr> z = 0.06.

4. Policy Implications

To the extent that offshoring reflects comparative advantage, then it would be counterproductive to try to stop it.



More concretely, think of the offshoring process in the following way. By shifting a job offshore where it can be undertaken more cheaply, resources (including labor) are freed up to undertake more productive activities. This is the idea in the figure to the right.

Notice that for each $1 in US corporate spending shifted offshore, the US benefits to the amount of $1.14. In Europe, each €1 yields €0.77. The difference is attributed to the lower re-employment rate in Germany (only 40% of displaced are re-employed).

The policy implication is that outsourcing should be encouraged. But the question is how to prevent protectionist measures to penalize outsourcing.